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**Enhancing the Freshman Year Experience: Focus on What Makes a Difference**

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**ABSTRACT****Enhancing the Freshman Year Experience: Focus on What Makes a Difference**

This paper presents a model for studying the freshman year experience and identifying predictors of overall satisfaction with the first year in college. Results are based on a survey of 268 freshmen attending a private, selective college in the northeast. Findings confirm the importance of social experiences. Three of five significant predictors of overall satisfaction involved social relationships: satisfaction with sense of community ( $b = .42, p \leq .001$ ); success in developing close friendships ( $b = .18, p \leq .01$ ); and participation in student clubs ( $b = .11, p \leq .05$ ). These variables, together with satisfaction with campus resources ( $b = .18, p \leq .01$ ) and the quality and relevance of the education ( $b = .15, p \leq .05$ ), explained 53 percent of the variance in students' overall satisfaction with their freshman year experience.

## **Introduction**

Purpose. This paper presents a model for studying students' experience during the freshman year in college, with a particular focus on how this experience differs for male and female, international and domestic students. Primary objectives of this research were to investigate students' social and academic experience during their freshman year; to increase knowledge of differences among student subgroups; and to assess the relative importance of academic and social experiences in predicting students' overall satisfaction. The goal of the study was to effect planning and policy to enhance the effectiveness of the first year experience for all students. The study was designed to address the following research questions:

- What is the nature of students' academic and social first year college experience?
- Do international and domestic, male and female students differ significantly in their perception of abilities, goals and first year college experiences?
- What student characteristics and freshman year experiences significantly predict students' overall satisfaction with the freshman year in college?
- What is the relative importance of academic and social factors in this prediction?

## **Review of the Literature**

Cross (1997) defines the freshman year of college as analogous to "working out a puzzle". Higher education's role may be viewed as helping students assemble the frame of the college puzzle and connect the varied experiences that make up a college education. The global emergence of first-year programs over the last two decades reflects the higher education community's realization of the significance of this challenge (Barefoot, 2000). Conferences on the first-year experience have featured such programs in China, Russia, Sweden, South Africa, Australia, Canada and in the United States (Univ. of So. Carolina, 1994).

While first year programs proliferated, researchers investigated what happens to students in their freshman year and how this affects outcomes. Upcraft (1985) identified the type of campus

climate that enhances freshman success, i.e., one that promotes student-to-student interaction; fosters faculty-student contact; and offers on-campus residential living and extracurricular opportunities. Several studies highlight the close relationship among the academic, psychological and social factors that affect the freshman year experience. These studies document significant relationships between academic success and self-reported attitudes and behaviors (Wilkie & Redondo, 1996); lower scores on a stress index (Sugarman & Lindle, 2003); and increased numbers of new friends (Skahill, 2002). Previous research also found significant relationships between levels of social support and life satisfaction (Coffman & Gilligan, 2002) and between participation in co-curricular activities and students' adjustment (Fenzel, 2001) and critical thinking at the end of the first year (Pascarella et al., 1996). Given such findings, Paul and Kelleher (1995) proposed that there is too much emphasis on academic adjustment during college transition when a more critical issue is social adjustment.

Studies documenting gender and citizenship differences in college student satisfaction and adjustment also provide relevant background information for this research. Bean and Vesper (1994) found that social/relational factors - including contact with advisors, having friends and living on campus - were significantly related to satisfaction for females but not males, while encouragement of parents, father's educational level and choice of major and occupational certainty were significantly related to satisfaction for males but not females. Other studies have identified language proficiency, social factors and cultural differences as significant determinants of international students' adjustment in college. (Bunz, 1997; Nicholson, 2001; Stoyhoff, 1997; Tompson & Tompson, 1996; Zhai, 2002; and Zimmermann, 1995).

Several studies have established the impact of freshman year experiences on a range of outcomes, including student academic success, intellectual growth, retention and satisfaction with college (Coffman & Gilligan, 2002; Horn, 1998; and Pascarella & Terenzini, 1991).

Terenzini and Wright (1987) discovered that first year academic integration had both a direct effect on freshman year growth and an indirect effect on sophomore year growth. Gerken and Volkwein (2000) found that for 11 of 12 outcomes - including intellectual and personal growth, credits, degree completion and final GPA - the strongest predictors were the vitality of student interaction with faculty and with each other during the freshman year.

Finally, while previous studies have identified several factors that affect the outcome of students' freshman year in college, more knowledge is needed to assess the relative importance of academic and social factors and to determine how the freshman year experience differs by gender and citizenship. The present study provides a model for exploring these issues.

### **Methodology**

Data Source. The study is based on data from 268 freshmen who completed the Cooperative Institutional Research Program (CIRP) Survey and Your First Year in College (YFCY) Survey at the beginning and end of the 2002-2003 academic year. The surveys are sponsored by the Higher Education Research Institute at the University of California at Los Angeles. Respondents represent 68 percent of 397 enrolled freshmen attending a private, selective college in the northeast region of the United States.

Methods of Analysis. Univariate analyses addressed the first research question: What is the nature of students' academic and social experience during the first year in college? Two-way analyses of variance were employed to answer the second research question: Do international and domestic, male and female students differ significantly in their perception of abilities, goals and first year college experiences? Hierarchical regression analysis was conducted to cope with the third and fourth research questions: What student characteristics and freshman year experiences significantly predict students' overall satisfaction with the freshman year in college? What is the relative importance of academic and social factors in this prediction? Independent

variables were entered in two stages. Demographic variables, citizenship and gender, were entered first, followed by freshman year experience variables. Analyses were conducted with individual survey items and scale scores.

Development of Scales. Factor analysis was employed to identify the underlying dimensions represented in the data. Scales were created for factors that explained a substantial amount of variance and included at least three items with factor loadings of .4 or higher. Five freshman year experience scales were created measuring the following dimensions: successful academic adjustment, applied interactive educational experience, intellectual growth, enhanced community/global understanding, and social integration. Two scales were created referring to satisfaction with the quality and relevance of the education and satisfaction with campus resources and services. Scale scores represent the mean of the items comprising the scales.

Table 1 presents the statistical properties of the scales including the mean and standard deviation for the total group and the alpha reliability coefficients measuring the scales' internal consistency. As shown, the reliability coefficients are relatively high; four of the coefficients are above .85 and all are .75 or higher. Appendix A identifies the items included in each scale.

**Table 1**  
**Statistical Properties of the Scales**

Scales	Mean	S.D.	Reliability	No. of Items	Range of Resp. Low-High
<u>Freshman Year Experiences</u>					
Successful academic adjustment	2.36	.47	.77	3	1-3
Applied interactive educational experience	2.74	.64	.77	6	1-4
Intellectual growth	4.22	.53	.87	4	1-5
Enhanced community/global understanding	3.69	.75	.87	3	1-5
Social integration	2.68	.74	.75	3	1-4
<u>Satisfaction</u>					
Quality and relevance of education	3.97	.78	.86	3	1-5
Campus resources and services	3.88	.57	.87	9	1-5

Study Limitations. This study is based on research conducted at a single institution. Therefore, the results may not be generalizable to some other institutions. However, the methodology can easily be adapted for research at other colleges and universities. Also, findings from this research are evaluated within the context of previous research and these findings may be used to generate hypotheses for future studies on the freshman year experience.

## Results

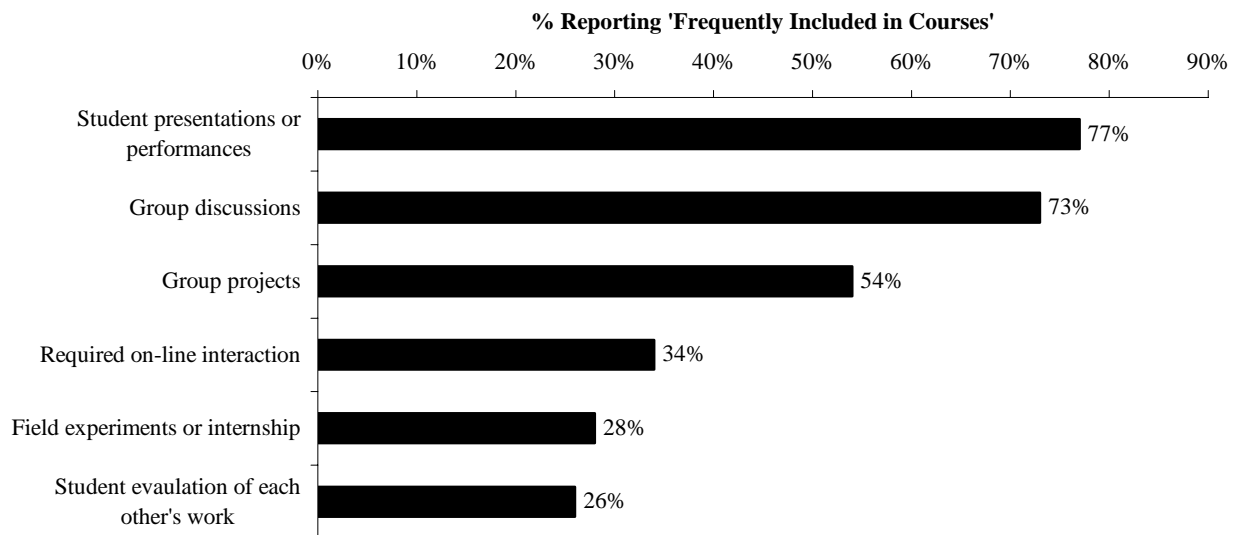
### Overview of the First College Year Experience

Results presented in this section address the first research question, “What is the nature of students’ academic and social experience during the first year in college?” Academic and social experience is operationally defined in terms of types of educational experiences, interaction with faculty and advisors, time spent in activities, perceived growth, successes achieved, and satisfaction with specific aspects of the first year experience.

*Educational Experiences.* Data presented in Figure 1 reflect a highly interactive, group oriented educational experience. Over 70 percent report that student presentations and group

discussions were frequently included in their courses. The majority frequently engaged in group projects; about one-third indicated that their courses frequently required on-line interaction with professors and/or classmates; and more than one-quarter reported frequent involvement with field experience and student evaluation of each other's work.

**Figure 1. Course Related Educational Experiences**



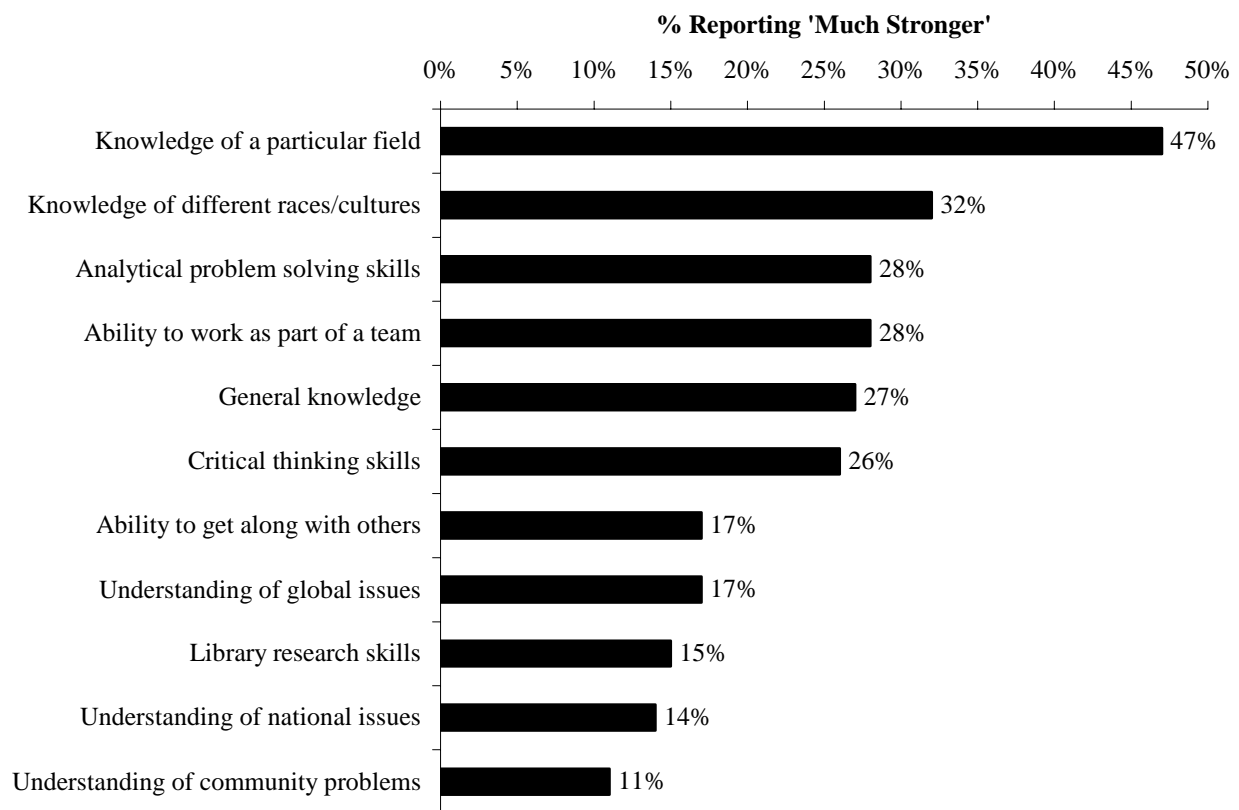
*Interaction with Faculty and Advisors.* Close to 30 percent interacted with faculty during and outside of office hours at least once a week and 60 percent or more did so at least once or twice a month. Interaction was less frequent with advisors; 25 percent never contacted their advisor and 43 percent did so only once or twice a term.

*Time Spent in Activities.* Data regarding the number of hours students spent in a typical week on various activities revealed that students spent most of their time studying; close to 40 percent studied for 16 or more hours per week and 66 percent did so for 11 or more hours per week. Next in order, 30 percent spent 16 or more hours per week and 51 percent spent 11 or more hours socializing with friends. In contrast, 66 and 92 percent respectively expended only two hours or less per week in student clubs and reading for pleasure.



*Perceived Growth.* Figure 2 displays students' assessment of their knowledge and abilities at the end of the first year compared with when they entered college. As shown, almost 50 percent reported their knowledge in a particular field to be much stronger, and close to 30 percent reported much stronger growth in knowledge of different races and cultures, analytical skills and the ability to work as a member of a team. In contrast, fewer than 20 percent reported they were much stronger in understanding of community problems, national and global issues.

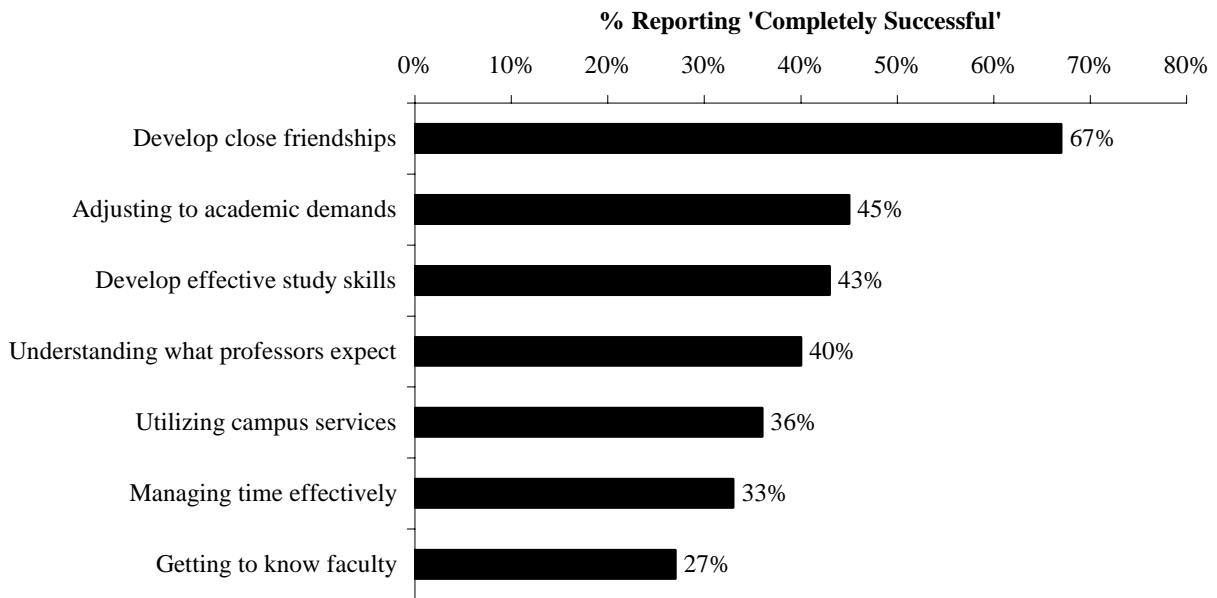
**Figure 2. Perceived Growth During Freshman Year**



*How Students Felt.* Given the importance of emotional health, students were asked how they felt during their first year in college. Nine percent reported they frequently were worried about meeting new people and 15 percent frequently felt lonely or isolated from campus life. Close to one-third indicated they occasionally experienced these feelings.

*Successes Achieved.* First year students were asked to evaluate their success in terms of various personal, social and academic goals. Figure 3 displays the percent who reported they felt completely successful in accomplishing these goals. As shown, 67 percent considered they were completely successful in developing close friendships with other students, and between 40 and 50 percent thought they were completely successful in adjusting to academic demands, developing effective study skills, and understanding what professors expect. In comparison, only 36 percent or fewer deemed they were completely successful in utilizing campus services, managing time effectively and getting to know faculty.

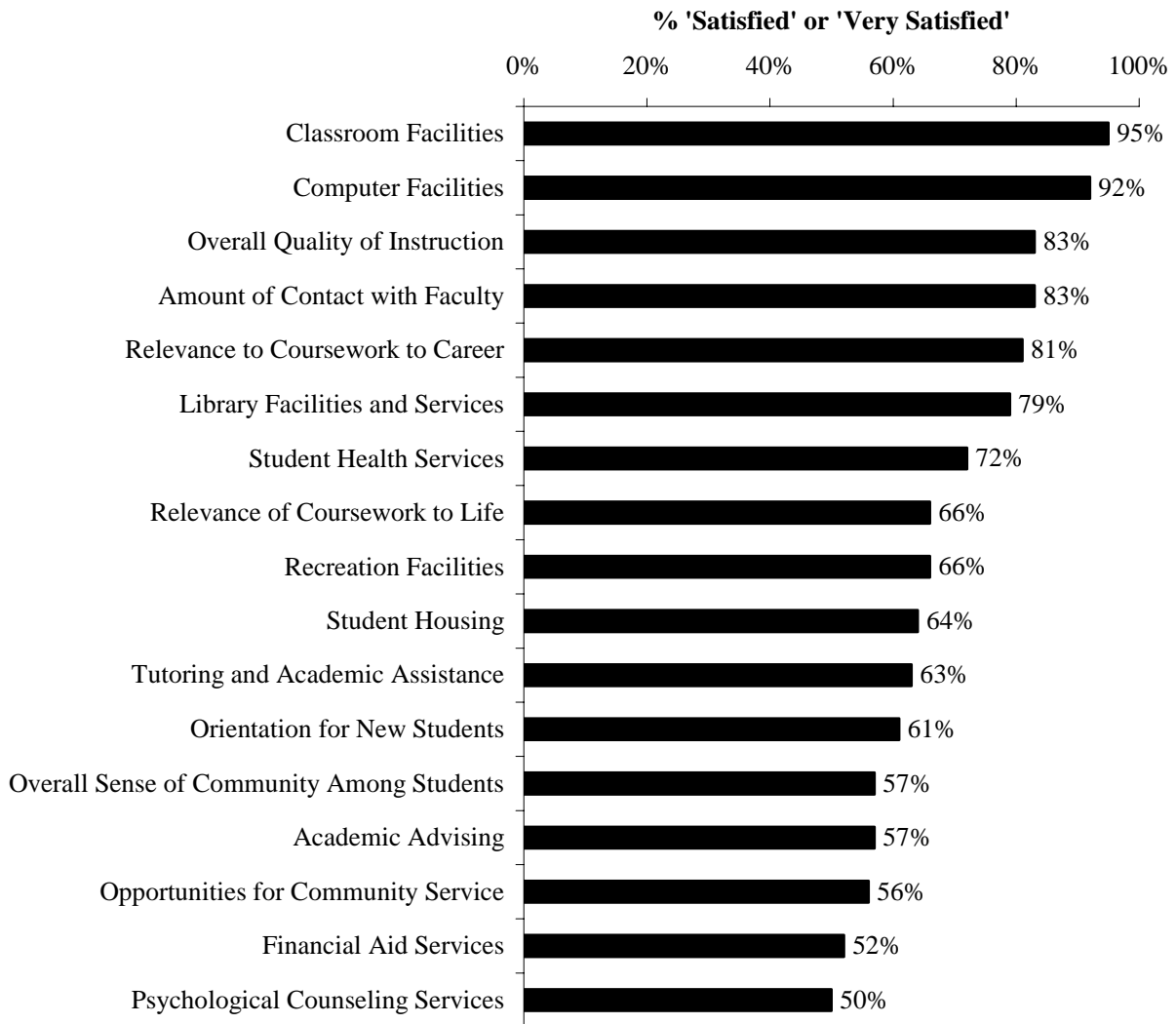
**Figure 3. Degree of Success Achieved**



*Satisfaction with Specific Aspects of the First Year Experience.* Figure 4 presents students' level of satisfaction with different aspects of their college experience. As shown, the majority are satisfied with a broad range of academic resources and student services. Satisfaction is exceptionally high in most academic areas. Over 90 percent are satisfied with classroom and computer facilities, and over 80 percent are satisfied with the overall quality of instruction,

amount of contact with faculty and the relevance of coursework to their careers. Moderate levels of satisfaction are reported in some other areas, including student housing, tutoring, sense of community among students, and academic advising.

**Figure 4. Level of Satisfaction with Specific Aspects of the First Year Experience**



### Variation by Gender and Citizenship

Two-way analyses of variance were conducted to examine the relationship between gender, citizenship and freshman self-ratings, goals and first year experiences.

*Variation in Self-Ratings.* As shown in Table 2, males reported higher ratings on several abilities, including computer skills ( $F = 9.30, p \leq .01$ ), risk-taking ( $F = 14.90, p \leq .001$ ), intellectual self-confidence ( $F = 16.83, p \leq .001$ ) and social self-confidence ( $F = 3.92, p \leq .05$ ). These differences are substantively significant given their relevance to academic and career success. International students rated themselves significantly higher than domestic students on artistic ability ( $F = 12.39, p \leq .001$ ) and creativity ( $F = 5.91, p \leq .05$ ). A significant interaction was found on public speaking ability; international male students rated themselves highest while international female students rated themselves lowest on this trait ( $F = 4.89, p \leq .05$ ).

*Variation in Goals.* Table 3 presents significant differences in goals by gender and citizenship. As shown, males were more invested in being successful in their own business ( $F = 8.38, p \leq .01$ ). International students expressed greater commitment to understanding other cultures ( $F = 22.94, p \leq .001$ ); developing a meaningful philosophy of life ( $F = 8.55, p \leq .01$ ); being successful in their own business ( $F = 6.20, p \leq .05$ ); integrating spirituality into life ( $F = 5.18, p \leq .05$ ); and being very well off financially ( $F = 5.39, p \leq .05$ ). Significant interaction effects were found with respect to becoming involved in environmental cleanup ( $F = 5.33, p \leq .05$ ) and keeping up with political affairs ( $F = 4.12, p \leq .05$ ). International male students were most committed to these goals, while domestic males were least committed to participation in environmental cleanup and international female students were least committed to keeping up with political affairs.

**Table 2**  
**Significant Differences in Self-Ratings of Abilities at Entrance**

<b>Gender</b>					
<b>Abilities/Traits</b>	<b>Male</b>	<b>Female</b>	<b>Mean Diff</b>	<b>F Ratio</b>	
Computer	3.64	3.01	.63	9.30 **	
Risk-taking	3.57	3.06	.51	14.90 ***	
Intellectual Self-Confidence	4.01	3.54	.47	16.83 ***	
Emotional health	4.25	3.96	.29	4.38 *	
Social Self-Confidence	3.69	3.45	.24	3.92 *	
Leadership	4.01	3.82	.19	5.93 *	
Academic	4.21	4.03	.18	6.94 **	
Writing	3.48	3.31	.17	4.11 *	

<b>Citizenship</b>					
	<b>International</b>	<b>Domestic</b>	<b>Mean Diff</b>	<b>F Ratio</b>	
Artistic	3.31	2.61	.70	12.39 ***	
Creativity	3.93	3.51	.42	5.91 *	

<b>Gender and Citizenship</b>					
	<b>International</b>		<b>Domestic</b>		<b>F Ratio</b>
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	
Public Speaking	3.47	2.67	3.33	3.34	4.89*

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

**Table 3**  
**Significant Differences in Goals**

<b>Gender</b>				
<b>Goals</b>	<b>Male</b>	<b>Female</b>	<b>Mean Diff</b>	<b>F Ratio</b>
Be successful in a business	3.30	2.76	.54	8.38 **

<b>Citizenship</b>				
	<b>International</b>	<b>Domestic</b>	<b>Mean Diff</b>	<b>F Ratio</b>
Improve understanding of other cultures	3.52	2.48	1.04	22.94 ***
Develop meaningful philosophy of life	2.90	2.11	.79	8.55 **
Be successful in own business	3.57	2.97	.60	6.20 *
Achieve in a performing art	1.95	1.41	.54	10.06 **
Integrate spirituality into my life	2.52	2.01	.51	5.18 *
Be very well off financially	3.71	3.34	.37	5.39 *
Become authority in own field	3.38	2.98	.40	4.18 *
Have administrative responsibility	3.00	2.61	.39	3.94 *
Make theoretical contribution to science	1.57	1.27	.30	4.26 *

<b>Gender and Citizenship</b>					
	<b>International</b>		<b>Domestic</b>		<b>F Ratio</b>
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	
Environmental clean-up	2.38	1.88	1.57	1.95	5.33*
Keep up with political affairs	2.77	1.88	2.30	2.34	4.12*

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$

*Variation in First Year Experiences.* The nature of the first year experience also differs by gender and citizenship status. As shown in Table 4, males report greater success in understanding professors' expectations ( $F = 4.74, p \leq .05$ ) and getting to know faculty ( $F = 4.08, p \leq .05$ ). Males also report spending significantly more time playing video or computer games ( $F = 10.95, p \leq .001$ ) and reading for pleasure ( $F = 6.23, p \leq .05$ ), while females report spending more time working for pay on campus ( $F = 8.40, p \leq .01$ ). Analyses by citizenship reveal that international students spent significantly more time interacting with faculty during office hours ( $F = 5.92, p \leq .05$ ) and surfing the internet ( $F = 6.38, p \leq .05$ ), while domestic students spent significantly more time exercising or engaging in sports ( $F = 9.67, p \leq .01$ ). No statistically significant differences were found by gender and citizenship in perceived growth during the freshman year.

Two-way analysis of variance revealed a significant interaction effect by gender and citizenship on the social integration scale ( $F = 4.74, p \leq .05$ ). A high score on this scale indicates that a student was not likely to feel lonely, be worried about meeting new people, or feel isolated from campus life. International male students scored highest while international female students scored lowest on this scale.

Chi-Square analyses revealed two interesting differences in the first year experiences of male and female freshmen. Twenty percent of females, compared with only 10 percent of males, reported they frequently felt lonely ( $X^2 = 10.60, p \leq .01$ ), while 60 percent of females, compared with 38 percent of males, reported they daily interacted with close friends not at this institution ( $X^2 = 15.95, p \leq .01$ ). Results from these analyses suggest that female students were less socially integrated and more likely to feel lonely and isolated during their first year in college.

**Table 4**  
**Significant Differences in First Year Experiences**

<b>Gender</b>					
	<b>Male</b>	<b>Female</b>	<b>Mean Diff</b>	<b>F Ratio</b>	
<u>Success Achieved</u>					
Understanding what professors expect	2.47	2.27	.20	4.74 *	
Getting to know faculty	2.20	2.07	.13	4.08 *	
<u>Time Spent in Activities</u>					
Playing video/computer games	2.69	1.67	1.02	10.95 ***	
Reading for pleasure	1.94	1.51	.43	6.23 *	
Working for pay on campus	1.62	2.27	-.65	8.40 **	
<b>Citizenship</b>					
	<b>International</b>	<b>Domestic</b>	<b>Mean Diff</b>	<b>F Ratio</b>	
<u>Interaction with Others</u>					
Interact with faculty during office hours	3.39	2.85	.54	5.92 *	
<u>Time Spent in Activities:</u>					
Surfing the internet	4.67	3.94	.73	6.38 *	
Exercising/sports	3.27	4.25	-.98	9.67 **	
<b>Gender and Citizenship</b>					
	<b>International</b>		<b>Domestic</b>		<b>F Ratio</b>
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>	
Social integration	3.07	2.36	2.67	2.58	4.47*

\* p < .05; \*\* p < .01; \*\*\* p < .001



### **Impact of the First Year in College**

Analyses of covariance were conducted to assess whether - after controlling for pre-existing differences - male and female, international and domestic students differed significantly at the end of the first year on self-ratings, goals and time spent in activities. Results revealed that after controlling for pre-existing differences, male students rated themselves significantly higher on academic ability ( $F = 7.78, p \leq .01$ ), drive to achieve ( $F = 4.58, p \leq .05$ ), mathematical ability ( $F = 4.36, p \leq .05$ ), risk-taking ( $F = 4.43, p \leq .05$ ), and intellectual self-confidence ( $F = 5.78, p \leq .05$ ). Male students also expressed stronger commitment to influencing the political structure ( $F = 4.81, p \leq .05$ ) and spent significantly more time playing video games ( $F = 4.66, p \leq .05$ ). International students rated themselves significantly higher on mathematical ability ( $F = 5.90, p \leq .05$ ). They were also more committed to making a theoretical contribution to science ( $F = 6.62, p \leq .05$ ) and becoming successful in their own business ( $F = 3.98, p \leq .05$ ).

### **Correlates of Satisfaction with the Overall First Year College Experience**

Correlation analyses were conducted between satisfaction with the overall college experience and the following sets of variables: self-ratings of abilities and traits; life goals; personal feelings; interaction with others; perceived growth during the first year; successes achieved during the first year; and satisfaction with particular aspects of the college experience. Results revealed no substantial, statistically significant correlations with self-ratings, goals or the interaction variables. Table 5 displays the statistically significant correlates found with perceived growth, successes achieved, personal feelings and satisfaction with specific aspects of the college experience. Coefficients range between .21 and .61.

**Table 5**  
**Correlates of Satisfaction with the First Year Overall College Experience**

<b>Correlates</b>	<b>Correl. Coef.</b>	<b>Correlates</b>	<b>Correl. Coef.</b>
<b>Perceived Growth</b>		<b>Personal Feelings</b>	
Ability to get along with others	.32***	Lonely or homesick	-.31***
Knowledge of different races/cultures	.24***	Isolated from campus life	-.35***
Critical thinking skills	.22***	Courses inspired new thinking	.22***
Knowledge of a particular field	.21***		
<b>Successes Achieved</b>		<b>Satisfaction with ...</b>	
Developing close friendships	.39***	Sense of community	.61***
Utilizing campus services	.35***	Overall quality of instruction	.48***
Adjusting to academic demands	.35***	Relevance of courses to life	.39***
Getting to know faculty	.24***	Relevance of courses to career	.38***
Developing effective study skills	.23***	Computer facilities	.32***
Acquiring library research skills	.23***	Library facilities	.30***
Understanding professors' expectations	.21***	Opportunity for com. service	.29***
		Contact with faculty	.28***

\*\*\*  $p < .001$

As shown in Table 5, approximately one-half of the correlates of satisfaction with the overall college experience involve affective or social experiences while most of the remainder relate to the educational experience. The strongest affective or social correlates include satisfaction with the overall sense of community among students (.61,  $p \leq .001$ ); success in developing close friendships with students (.39,  $p \leq .001$ ); not feeling isolated from campus life (.35,  $p \leq .001$ ); and perceived growth in the ability to get along with others (.32,  $p \leq .001$ ). Significant educational experiences include success in adjusting to academic demands (.35,  $p \leq .001$ ) and satisfaction with: the overall quality of instruction (.48,  $p \leq .001$ ), the relevance of coursework to life (.39,  $p \leq .001$ ) and the relevance of coursework to one's career (.38,  $p \leq .001$ ). Students who rated these experiences positively were more likely to be satisfied.

### **Predicting Overall Satisfaction with the Freshman Year in College**

Multiple regression was employed to answer the question: What student characteristics and freshman year experiences significantly predict students' overall satisfaction with the freshman year? Based primarily on previous research and results from bivariate analyses, variables were included as potential predictors in the regression analysis if they met the statistical criterion, i.e., a correlation coefficient  $\geq .15$ , at the .01 level of significance. The demographic and freshman year experience variables were entered stepwise in two phases. Although Chi-Square analyses revealed no significant relationship between gender, citizenship and overall satisfaction, these variables were included based on the institution's policy interest in these variables.

Previous studies identified the following variables as significant determinants of student overall satisfaction with the first year experience: a person-oriented campus climate (Upcraft, 1985); the opportunity to develop friendships (Skahill, 2002), social support networks (Coffman and Gilligan, 2002); and participation in co-curricular activities (Fenzel, 2001). Variables representing these constructs were considered in the initial set of potential predictors in this study.

Two analyses were then performed to investigate the extent of multicollinearity among these variables. Correlational analyses revealed weak to moderate correlations among the independent variables selected as predictors. Two coefficients exceeded .40; four ranged between .20 and .40; and four coefficients were below .08. Tolerance statistics were also computed for each of the independent variables. The tolerance statistic represents the proportion of a variable's variance not accounted for by other independent variables in the equation.<sup>1</sup> The tolerance coefficients range from .67 to .99, indicating that these variables are substantially unique.

<sup>1</sup> The tolerance statistic is calculated as  $1 - R^2$  for an independent variable when it is predicted by the other independent variables already included in the analysis. It is a measure of the uniqueness of the predictor variables. Default tolerance levels range between .01 and .001 before variables are excluded. For further discussion on this topic, see Tabachnick and Fidell (2001, p. 84).

Regression results are displayed in Table 6. As shown, gender and citizenship do not significantly predict overall satisfaction. The statistically significant predictors are: satisfaction with overall sense of community among students ( $b = .42, p \leq .001$ ); satisfaction with campus resources and services ( $b = .18, p \leq .01$ ); success in developing close friendships with other students ( $b = .18, p \leq .01$ ); satisfaction with the quality and relevance of the education ( $b = .15, p \leq .05$ ); and participation in student clubs ( $b = .11, p \leq .05$ ). The  $R^2$  of .53 indicates that these variables explain 53 percent of the variance in students' overall satisfaction.

**Table 6**  
**Multiple Regression Results: Predicting Students' Satisfaction**  
**with the First Year Overall College Experience**

Predictors	Beta Coefficient	t Ratio	R <sup>2</sup>	F Ratio
<b>Demographic Variables</b>				
Gender	.02	.47		
Citizenship	.01	.20		
<b>First Year Experience Variables</b>				
Satisfaction with sense of community among students	.42	6.93***		
Satisfaction with campus resources and services	.18	3.17**		
Success in developing close friendships	.18	3.12**		
Satisfaction with quality and relevance of education	.15	2.53*		
Participation in student clubs	.11	2.09*		
			.53	30.71***

\*  $p \leq .05$ ; \*\*  $p \leq .01$ ; \*\*\*  $p \leq .001$

## Discussion

Results from this research bear significant implications for planning successful freshman year experience programs. Gender differences found suggest the need for programs to enhance female students' confidence in their abilities and to promote their academic integration in college. Upon entering college, males rated themselves significantly higher than females on a range of abilities, including computer skills, risk-taking, intellectual and social self-confidence and academic ability. After controlling for pre-existing differences, at the end of the first year male students still rated themselves significantly higher on several traits. Male students also reported greater success in understanding what professors expected and getting to know faculty.

Analyses by citizenship offer insight regarding cultural differences between international and domestic students and indicate the need to educate U.S. students regarding the value of understanding other cultures. International students placed significantly more importance on several life goals, including developing a meaningful philosophy of life; integrating spirituality into life; being successful in their own business; being well off financially; and understanding other cultures. Creating opportunities to explore the bases for these differences in goals will potentially foster greater understanding between international and domestic students and will ultimately promote a stronger sense of community.

Consistent with previous research findings, this study confirms the importance of social integration to student satisfaction with college (Bogler & Somech, 2002; Coffman & Gilligan, 2002; Fenzel, 2001; and Skahill, 2002). Three of five significant predictors of overall satisfaction with the freshman year involved social relationships: satisfaction with sense of community among students; success in developing close friendships; and participation in student clubs. Further, the effect of satisfaction with sense of community among students ( $b = .42$ ) was much greater than the impact of satisfaction with the quality and relevance of education ( $b = .15$ )

on overall satisfaction. These results suggest that social experiences have a greater influence than academic experiences on students' overall satisfaction with the freshman year in college, lending support to Paul and Kelleher's (1995) proposal that there is too much emphasis on academic adjustment during college transition when a more critical issue is social adjustment.

### **Recommendations**

Results from this research were translated into policy recommendations designed to emphasize the importance of the social experience and the need to reach out to all students, particularly women, in order to achieve greater integration and enhance overall satisfaction with the freshman year experience. Illustrative recommendations follow.

#### **1. Develop programs to enhance female students' confidence.**

Upon entering college, males reported significantly higher ratings on several abilities, including computer skills, risk-taking, intellectual self-confidence and social self-confidence. After controlling for initial differences, at the end of the first year male students rated themselves significantly higher on academic ability, drive to achieve, mathematical ability, risk-taking, and intellectual self-confidence.

#### **2. Initiate special outreach programs to ensure that female students feel integrated and supported by the college community.**

Males in this study reported greater success than females in understanding what professors expected and getting to know faculty. Results also show that 20 percent of females, compared with only 10 percent of males, frequently felt lonely. Some 60 percent of females, compared with 38 percent of males, daily interacted with close friends not at this institution. These contrasting findings suggest that female students were less socially integrated and more likely to feel lonely and isolated during their first year in college.

**3. Encourage all students, particularly U.S. students, to embrace the opportunity the College offers to enhance their understanding of other cultures.**

National studies have shown that domestic and international students often live in separate societies while attending the same college, and the potential opportunity for cultural enrichment is often missed. Results from this study reveal that domestic students attribute less importance than international students to improving their understanding of other cultures.

**4. Encourage students to invest time and energy to develop new friendships and participate in student clubs.**

Consistent with previous research, this study demonstrated that success in developing close friendships and participation in co-curricular activities enhanced student satisfaction with the overall first year college experience.

**5. Promote opportunities for first year students to get to know and interact with faculty.**

Statistical analyses identified satisfaction with the amount of contact with faculty and perceived success in getting to know faculty as significant correlates of satisfaction with the overall first year college experience.

**6. Encourage all members of the college community to offer a warm welcome to new students. Highlight the importance of community involvement and create attractive opportunities for new students to become active members of the college community.**

Satisfaction with a sense of community among students was the strongest correlate and the strongest, statistically significant predictor of satisfaction with the overall first year college experience.

### **Conclusion**

Results from this study support one major conclusion. Positive social experiences are of paramount importance to student overall satisfaction with the freshman year in college. Critical experiences include a sense of community among students, the development of close friendships and active participation in student activities. Differences by gender and citizenship suggest that special attention should be given to promoting the social integration of female students and to fostering greater understanding between domestic and international students.



## Appendix A: Questionnaire Items Comprising the Scales

### Freshmen Year Experience Scales

#### *Successful Academic Adjustment*

Q8. Since entering this college, how successful have you felt at:

- a. Developing effective study skills
  - b. Adjusting to the academic demands of college
  - c. Managing your time successfully
- (Response scale: 1 'Unsuccessful' to 3 'Completely Successful')

#### *Applied interactive educational experience*

Q15. Please indicate how often each of the following has been included in your courses.

- a. Student evaluations of each other's work
  - b. Field experience or internship
  - c. Community service linked to coursework
  - d. Student-selected topics
  - e. Laboratory component
  - f. Required on-line interaction w/ professors and/or classmates
- (Response scale: 1 'Not at all' to 4 'Frequently')

#### *Intellectual growth*

Q18. Compared with when you entered this college, how would you now describe your:

- a. General knowledge
  - b. Analytical and problem solving skills
  - c. Knowledge of a particular field or discipline
  - d. Critical thinking skills
- (Response scale: 1 'Much weaker' to 5 'Much stronger')

#### *Enhanced community/global understanding*

Q18. Compared with when you entered this college, how would you now describe your:

- a. Understanding of the problems facing your community
  - b. Understanding of national issues
  - c. Understanding of global issues
- (Response scale: 1 'Much weaker' to 5 'Much stronger')

**Appendix A: Questionnaire Items Comprising the Scales  
(Continued)**

*Social integration*

Q13. Since entering this college, how often have you felt:

- a. Lonely or homesick
  - b. Worried about meeting new people
  - c. Isolated from campus life
- (Response scale: 1 'Frequently' to 4 'Not at all')

Satisfaction Scales

*Quality and relevance of education*

Q22. Please rate your satisfaction with this institution on each of the aspects of campus life listed below.

- a. Relevance of coursework to everyday life
  - b. Relevance of coursework to future career plans
  - c. Overall quality of instruction
- (Response scale: 1 'Very Dissatisfied' to 5 'Very Satisfied')

*Campus resources and services*

Q5. Please rate your satisfaction with each of the following at this institution.

- a. Classroom facilities
  - b. Computer facilities
  - c. Library facilities or services
  - d. Student housing facilities
  - e. Financial aid services
  - f. Student health center/services
  - g. Psychological counseling services
  - h. Recreational facilities
  - i. Orientation for new students
- (Response scale: 1 'Very Dissatisfied' to 5 'Very Satisfied')

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